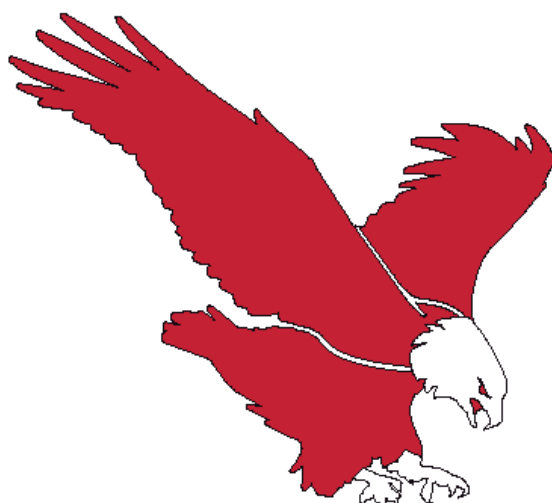


**3rd World Scientific Congress
of Combat Sports and Martial Arts
and 3rd IMACSSS International Conference**

ABSTRACT BOOK

October 15–17, 2014, Rzeszów, Poland

Wojciech Jan Cynarski and Anna Nizioł [Eds.]



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Methods

There were 30 karate ka girls who were chosen as samples, and were divided into two groups: experimental group and placebo group, and all groups in one place, at high intensity, have been practicing jumping training, startling training and a series of specific karate movements with maximum power of 70 percent every day for an hour. The final exam which has been spotted for anaerobic power operation was 8 sec Wingate exam. After practicing all the pre-test stage training, the subjects have consumed creatine with quantity of 200 and 300 mgr during 6 days randomly (10 people 200 mgr and 10 other people 300 mgr, for each kilogram of the body weight and for the control group, an adequate amount of wheat flour has been given. For the comparison of pre-test and past-test of each group results, the T test has been used.

Results

The results showed that short-term consumption of creatine with amount of 200 and 300 mgr causes anaerobic power increase which is negligible and has no significant affect statistically ($P > 0.05$).

Discussion and conclusion

So, in order to improve anaerobic operation of girl karate ka, usage of creatine supplements is not recommended (according to consumption duration and values of this research)

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FLOW STATE IN ELITE JUDO ATHLETES: A DESCRIPTIVE ANALYSIS OF TWO SCALES OVER A FOURTEEN-WEEK PERIOD

Key words: sport psychology; elite sport; combat sports; martial arts.

Introduction

Flow is defined as “the way people describe their state of mind when consciousness is harmoniously ordered, and they want to pursue whatever they are doing for its own sake” [Csikszentmihalyi 1990: 6]. This construct has received growing attention by Psychology and Sport Sciences researchers in the last years, especially at the elite level due to, among other reasons, its relationship to peak performance and sport success [Jackson, Csikszentmihalyi 1999]. Taking this into consideration, the purposes of the present study were: (a) to describe the flow characteristics in elite judo athletes; (b) to analyse and compare their flow characteristics in different moments of the sport season (competitive period).

Methods

Participants were eight elite judo athletes (5 male, 3 female) training at the Madrid High-Performance Training Centre. Ages ranged from 16 to 35 years ($M = 22.75$; $SD = 5.9$ years), with 12 or more years of

experience in judo practice ($M = 15.63$; $SD = 2.7$ years), and all participants held the rank of black belt. To assess the flow state we used the Dispositional Flow Scale (DFS) and the Flow State Scale (FSS) [Spanish versions by García-Calvo *et al.* 2008] and the Escala de Flow Disposicional - versión breve (EFD-B) [Dispositional Flow Scale – brief version] [Godoy-Izquierdo *et al.* 2009]. The DFS and EFD-B scales were administered at the pre-test and post-test (fourteen-week, during the competitive period) stages, while the FSS and the EFD-B were administered once a week after the after the training session that took place on Wednesdays. Means and standard deviations were calculated and we used a Friedman mean rank test to compare the obtained values for each scale in the pre-test, training (14-week mean scores) and/or post-test stages.

Results

DFS pre-test results showed that the “Loss of self-consciousness or inhibition” factor achieved the higher scores among the nine factors of the scale ($M = 3.2$; $SD = .73$), while the factor “Autothelic experience” scored higher for the EFD-B ($M = 4$; $SD = .93$). Mean scores during the 14-week period were higher for the “Loss of self-consciousness or inhibition” factor both for the FSS ($M = 3.43$; $SD = .44$) and the EFD-B ($M = 4.02$; $SD = .68$). Post-test results revealed higher scores in the “Loss of self-consciousness or inhibition” factor for the FSS ($M = 3.3$; $SD = .72$), and in the “Autothelic experience” factor for the EFD-B ($M = 4.3$; $SD = 1.04$). Finally, Friedman test showed differences in the “Sense of control” factor for the EFD-B ($p < .05$), with increased scores through the period, and no differences for the DFS (pre-test and post-test) and for the FSS (14-week mean scores).

Discussion and conclusions

This study has described the flow characteristics in a small sample of elite judo athletes. Differently from cross-sectional studies about flow in other sports [García-Calvo *et al.* 2008; Ruiz-Barquín, Rey 2010; Ruiz-Barquín, Rodríguez 2013], we used three questionnaires to assess flow longitudinally during all the fourteen-week period. Findings showed the “Loss of self-consciousness or inhibition” and the “Autothelic experience” factors achieving the highest scores, while only the “Sense of control” factor of the EFD-B changed during the studied period, probably because of the athletes’ physical, technical and tactical improvement during the training process. These aspects could be considered as indicators of the flow state in elite judo athletes, so that specific interventions can be designed to generate a flow state in the athlete, especially near to the competition.

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